

**AMENDMENTS TO THE CLAIMS**

The claims in this listing will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. - 6. (Canceled)

7. (Currently Amended) A method for improving affinity with a fibrin glue of a polymeric material comprising carbon or silicon as a constitutional element, the polymeric material comprising expanded polytetra-fluoroethylene or silicone, comprising irradiating at least a portion of a surface of the expanded polytetra-fluoroethylene or silicone with ions at a dose ( $\phi$ ) of  $1 \times 10^{12} \leq \phi \leq 1 \times 10^{16}$  ions/cm<sup>2</sup> to form an ion-modified expanded polytetra-fluoroethylene or silicone; and applying the fibrin glue to the irradiated at least a portion of a surface of the expanded polytetra-fluoroethylene or silicone, wherein the ion is He<sup>+</sup>, Ne<sup>+</sup>, Ar<sup>+</sup>, or Kr<sup>+</sup>.

8. (Previously Presented) The method according to claim 7 wherein the ion-modified expanded polytetra-fluoroethylene or silicone includes a non-irradiated portion and the non-irradiated surface is placed into contact with dura mater.

9. (Previously Presented) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone is an artificial dura mater, an artificial blood vessel, a patch for the heart or blood vessel, or a surgical suture.

10. (Previously Presented) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

11. (Previously Presented) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone is an artificial dura mater.

12. (Canceled)

13. (Previously Presented) The method according to claim 12 wherein the irradiating at least a portion of a surface of the expanded polytetra-fluoroethylene or silicone comprises irradiating with ions at a dose ( $\phi$ ) of  $1 \times 10^{13} \leq \phi \leq 1 \times 10^{15}$  ions/cm<sup>2</sup>.

14.-15. (Canceled)

16. (Previously Presented) The method according to claim 7 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

17. (Previously Presented) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

18. (Previously Presented) The method according to claim 8 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

19. (Previously Presented) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

20. (Previously Presented) The method according to claim 9 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

21. (Previously Presented) The method according to claim 11 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

22. (Previously Presented) The method according to claim 11 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

23.-24. (Canceled)

25. (Previously Presented) The method according to claim 13 wherein the expanded polytetra-fluoroethylene or silicone comprises expanded polytetra-fluoroethylene.

26. (Previously Presented) The method according to claim 13 wherein the expanded polytetra-fluoroethylene or silicone comprises silicone.

27. (Canceled)